

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
24 February 2005 (24.02.2005)

PCT

(10) International Publication Number
WO 2005/017183 A2

- (51) International Patent Classification⁷: **C12Q**
- (21) International Application Number:
PCT/US2004/020535
- (22) International Filing Date: 24 June 2004 (24.06.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/482,146 24 June 2003 (24.06.2003) US
- (71) Applicant (for all designated States except US): **JOHNS HOPKINS UNIVERSITY** [US/US]; 3400 No. Charles Street, Baltimore, MD 21218 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **GOGGINS, Michael, G.** [US/US]; 605 Stoney Spring Drive, Baltimore, MD 21210 (US). **NORIHIRO, Sato** [JP/JP]; 2005 Fitzwarren Place, Apt. T-2, Baltimore, MD 21209 (US).
- (74) Agents: **CORLESS, Peter, F.** et al.; Edwards & Angell, LLP., P.O. Box 55874, Boston, MA 02205 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:**
— without international search report and to be republished upon receipt of that report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: METHYLATED GENE BIOMARKERS FOR DETECTING CANCER

(57) Abstract: The present invention includes methods diagnosing of cancer by analysis of a patient sample, particularly for the presence of a methylated SPARC nucleic acid molecule, and particularly for the diagnosis of pancreatic cancer. The invention also includes therapeutic methods for treating cancers by administering to cancers patients therapeutically effective amounts of demethylating agents.

WO 2005/017183 A2